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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/910,657	07/20/2001	Dieter Jaepel	CH9-2000-0004(246)	2614
40987	7590	10/04/2004	EXAMINER	
AKERMAN SENTERFITT			LERNER, MARTIN	
P. O. BOX 3188			ART UNIT	PAPER NUMBER
WEST PALM BEACH, FL 33402-3188			2654	

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/910,657	Applicant(s) JAEPEL ET AL.	
	Examiner Martin Lerner	Art Unit 2654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 to 63 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 to 63 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

On page 16, lines 19 and 20, "processing unit 60" should be –processing unit 70—. The embodiment corresponds to that of Figure 6, and not of Figure 5.

On page 17, lines 8 to 10, Applicants should provide an application number for the cited U.S. Patent Application.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 to 4, 6 to 9, 11 to 14, 16, 17, 19, 21, 22, 24 to 28, 34, 36 to 40, 46 to 49, 51 to 54, 56 to 59, 61, and 62 are rejected under 35 U.S.C. 102(b) as being anticipated by *Mitchell et al.*

Regarding independent claims 1, 19, and 46, *Mitchell et al.* discloses a speech recognition system and computer program, comprising:

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“receiving an input” – recognition errors are corrected by a user, and the user decides whether to update the user’s contextual model (column 8, lines 9 to 12: Figure 5: Step S12; column 15, lines 13 to 16: Figure 15: Step S162);

“automatically creating a context-enhanced database using information derived from said input” – once all the recognition errors have been corrected, the contextual model is updated by selecting the text to be used for the update and sending the number of corrected words together with a list of the corrected words to the speech recognition engine for updating the contextual model (column 8, lines 17 to 22: Figure 5: Step S13; column 15, lines 19 to 35: Figure 15: Steps S163 to S167);

“preparing a first output from a speech signal by performing a speech recognition task to convert said speech signal into said first output comprising computer-processable segments, wherein said context-enhanced database is accessed to improve the speech recognition rate” – a user enters dictated text as spoken words (“computer-processable segments”) during a dictation process to produce a dictation output (“a first output”) (column 7, lines 40 to 48: Figure 5: Steps S3 and S4); speech recognition engine 11 performs speech recognition with an updated user model 21, where user model 21 comprises an acoustic model and a contextual model (column 5, lines 46 to 67: Figure 2); implicitly, speech recognition engine 11 improves the recognition rate when it utilizes an updated contextual model;

“enabling editing of said output to generate a final voice-generated output” – the user decides whether to correct recognition errors in the recognized text (column 8, lines 4 to 6: Figure 5: Step S10);

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“making said final voice-generated output available” – when the user has finished dictating, inserting and editing the text, the user has the option to save the document (column 8, lines 33 to 44: Figure 5: Step S16); a user can save or view the document (column 5, lines 59 to 67: Figure 2), or print it.

Regarding claims 2, 7, 21, 47, and 52, *Mitchell et al.* discloses speech recognition engine 11 recognizes words from a speech signal by identifying words from user model 21, which comprises an acoustic model and a contextual model (column 5, lines 41 to 67: Figure 2).

Regarding claims 3, 4, 22, 34, 48, and 49, *Mitchell et al.* discloses speech recognition engine 11 analyzes a speech signal input from microphone 5 (column 5, lines 14 to 56: Figures 1 and 2).

Regarding claims 6 and 51, *Mitchell et al.* discloses that at least (c) and (e) or (d) and (e) are performed concurrently as text is displayed on display 8, or made available immediately during dictation and editing (column 5, lines 59 to 67: Figure 2).

Regarding claims 8, 11, 25, 37, 53, and 56, *Mitchell et al.* discloses speech recognition engine 11 performs speech recognition with a user model 21, comprising an acoustic model and a contextual model (column 5, lines 41 to 56: Figure 2); a contextual model has words linked by context.

Regarding claims 9, 24, 36, and 54, *Mitchell et al.* discloses an application program for a text processing application 13 such as Microsoft WordTM, WordPerfectTM, or Lotus Word ProTM (column 6, lines 35 to 40).

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Regarding claim 12, 13, 26, 27, 38, 39, 57, and 58, *Mitchell et al.* discloses displaying text of a current document on display 8 or storing text in memory 20 (column 5, lines 59 to 67: Figure 2); implicitly, a word processing document can be printed from a text processing application 13 such as Microsoft WordTM, WordPerfectTM, or Lotus Word ProTM (column 6, lines 35 to 40).

Regarding claims 14 and 59, *Mitchell et al.* discloses highlighting words on the display for which a score is less than a threshold score (column 10, lines 12 to 18: Figure 8b: Steps S72 and S73).

Regarding claims 16, 17, 61, and 62, *Mitchell et al.* discloses a contextual model is updated (“dynamically generated” and “dynamically updated”) in response to correction of recognition errors by a user (column 8, lines 9 to 22: Figure 5: Steps S12 and S13).

Regarding claims 28 and 40, *Mitchell et al.* discloses correcting recognition errors (“editing”) for recognized text (column 8, lines 4 to 9: Figure 5: Steps S10 and S11).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 5, 10, 15, 18, 20, 23, 29 to 33, 35, 41 to 45, 50, 55, 60, and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Mitchell et al.* in view of *Baker et al.*

Concerning claims 10, 15, 20, 29, 41, 55, and 60, *Mitchell et al.* discloses a pre-existing database in memory 20 containing a user model 21 with a component that is contextual model. (Column 5, Lines 44 to 52: Figure 2) *Mitchell et al.* updates the contextual model based upon correction of recognition errors by a user, but does not say expressly how the contextual model is created, or what input is received to create a database containing a contextual model, although pre-existing contextual models must be generated in some manner initially.

However, *Baker et al.* teaches a speech recognition system with a context language model, where a word list generator 16 models the likely contexts of context words 36. The word list generator 16 can generate data for storing in the word list memory 22 by selecting words that have a semantic association. The word list generator 16 selects a reference source 40 containing sample passages or raw text, i.e. language information. Reference source 40 can be a dictionary, medical dictionary, legal dictionary, scientific or engineering dictionary, or other type of reference source (Column 14, Line 13 to Column 15, Line 49: Figures 1 to 5) Thus, *Baker et al.* teaches at least deriving a context language model from "a knowledge management system" as an existing database. The stated advantage is to improve speech recognition by providing context models when sufficient training data is not available for fields having application-specific terms. (Column 4, Lines 1 to 61) It would have been obvious to

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one having ordinary skill in the art to create a context model derived from an existing knowledge management database as taught by *Baker et al.* in the speech recognition system of *Mitchell et al.* for the purpose of improving recognition by providing context models when sufficient training data is not available for fields having application-specific terms.

Concerning claims 5, 23, 35, and 50, *Baker et al.* teaches alternate language databases for recognizing words in different languages, e.g. Greek, when words cannot be recognized in English (column 15, line 50 to column 16, line 8).

Concerning claims 18, 30, 31, 42, 43, and 63, *Baker et al.* teaches a reference source 40, which, includes a dictionary and thesaurus ("meanings variants database" and "synonym lexicon") (column 15, lines 5 to 8).

Concerning claims 32, 33, 44, 45, *Baker et al.* teaches a word list generator 16, which is "a pre-processing module", for generating a semantic association, or extracting meaning, between words ("a meaning extraction system") (column 14, line 57 to column 15, line 4).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to Applicants' disclosure.

Monaco, Morin et al., Dahan et al., and Lewis et al. disclose related art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin Lerner whose telephone number is (703) 308-

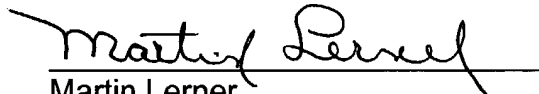
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9064. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (703) 305-9645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ML
9/27/04


Martin Lerner
Examiner
Group Art Unit 2654